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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/505,621	02/16/2000	Mark A. Hollar	M-7348 US	6010

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PALO ALTO, CA 94304-1018

EXAMINER

DAVIS, ZACHARY A

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

7

Office Action Summary

Application No.

09/505,621

Applicant(s)

HOLLAR ET AL.

Examiner

Zachary A Davis

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 7-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4, 5, 6, 14</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Applicant's claim for priority under 35 U.S.C. 119(e) to provisional application 60/121,806 is acknowledged.

Election/Restrictions

2. Claims 1-41 of the present application are under examination.
3. Claims 7-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 15.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "34a" has been used to designate differing set top boxes in Figure 1D and Figure 4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to because Figures 1C and 1D do not include reference character "43" for the record control as in Figure 1A. Additionally, where Figures 1C and 1D include element T' and note that " $T'=F(T)$ ", Figure 1A instead includes element T and notes that " $T=F(T)$ ". Further, in element 57 in Figure 3, reference is made to "WM" whereas the watermark in the previous figures is labeled "W". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

6. The disclosure is objected to because of the following informalities:

On page 15, line 10, reference is made to "recorder 429", whereas in the figures and elsewhere in the specification, the recorders are either element 42 or 42a.

On page 15, line 20, reference is made to a function "W". In the same paragraph, reference is made to watermarks W1 and W2. It is unclear whether "W" is intended to refer to the function for generating both watermarks, or if it refers to a specific watermark.

Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Appropriate correction is required.

Claim Objections

7. Claims 1 and 5 are objected to because of the following informalities:

Claim 1 reads "in the video blanking interval" in lines 5-6. It is assumed that this is intended to read "in the vertical blanking interval".

Claim 5 reads "carrying parental blanking data" in line 10. It is assumed that this is intended to read "carrying parental blocking data".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 4 and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the claims are rejected for failing to further limit the parent claims from which they depend. The limitation "line 21" is not further limiting as it only describes an arbitrarily numbered video line, not a specific function for that video line.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-3 and 5-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Linnartz, US Patent 6209092.

In reference to Claim 1, Linnartz discloses a method including supplying a video signal (for example, from disc 11 in Figure 1), embedding a watermark in the video signal (column 6, lines 5-16), and providing data associated with the watermark (column 6, lines 17-18; see column 6, lines 33-40, where the watermark is a function of the ticket T; see also column 5, lines 3-5 and 52-54) in a video line of the vertical blanking interval (column 6, lines 8-11).

In reference to Claim 2, Linnartz discloses everything as applied to Claim 1 above, and further discloses that the associated data is a cryptographic value (column 6, lines 17-18, where ticket T is a cryptographic counter).

In reference to Claim 3, Linnartz discloses everything as applied to Claim 2 above, and further discloses that the cryptographic value is a hash function of a seed

(column 6, lines 57-58, where F is a one-way function) and that the watermark is a multiple hash function of the seed (column 6, lines 59-60).

In reference to Claim 5, Linnartz discloses an apparatus including a seed generator (column 6, lines 1 and 55-57), a hash function generator receiving a seed and producing data (see column 5, lines 3-5 and subsequent, describing a one-way function; see also column 6, lines 57-58), a watermark generator receiving the seed and embedding the watermark (see column 6, lines 5-16 and 59-60), and a transmission channel transmitting the watermark and data (column 6, lines 5-16).

In reference to Claim 6, Linnartz discloses everything as applied to Claim 5 above, and further discloses that the watermark is a multiple hash function of the seed (column 6, lines 59-60).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 4 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linnartz in view of Elam et al, US Patent 4554584.

In reference to Claims 4 and 41, Linnartz discloses everything as applied above to Claims 1 and 5, respectively. However, Linnartz does not explicitly disclose sending the associated data on video line 21 of the vertical blanking interval.

Elam discloses that program related data is permitted to be inserted into line 21 of the vertical blanking interval of a video signal. This data may give "supplementary program information". Elam further discloses that "Television receivers are now commercially available having a circuit for detecting the line 21 data" (column 1, lines 15-23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Linnartz to use video line 21 in the vertical blanking interval to send the associated data, in order to take advantage of the fact that commercially available receivers can already detect data carried on line 21, such as supplementary program information, as taught by Elam (see column 1, lines 15-23).

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Linnartz et al, US Patent 6473560, disclose a system for copy protection of analog signals with a copy protection ticket carried on a line of the vertical blanking interval.

- b. Yuen et al, US Patent 5949471, discuss a system placing parental blocking information in the vertical blanking interval.
- c. Stas et al, US Patent 6025869, discuss a system placing parental blocking information in line 21 of the vertical blanking interval.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A Davis whose telephone number is 703-305-8902. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 703-308-4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

zad

Matthew D. Smithers
MATTHEW SMITHERS
PRIMARY EXAMINER
Art Unit 2137